

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|------------------------------------|----------------------|---------------------|------------------|
| 10/797,225 | 03/10/2004 | Heinz Focke | 20605.012US 2971 | |
| 25461 SMITH GAM | 7590 10/30/2007 BRELL & RUSSELL | | EXAMINER | |
| SUITE 3100, F | PROMENADE II | | DEWS, BROOKE J | |
| 1230 PEACHT ATLANTA, G | REE STREET, N.E. A 30309-3592 | | ART UNIT | PAPER NUMBER |
| , | | | 2182 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 10/30/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
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| Office Action Summary | 10/797,225 | FOCKE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| The MAILING DATE of this communication ap | Brooke J. Dews | 2182 | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | PATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e. cause the application to become ABANDONE | N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on <u>08 A</u> | August 2007. | | | | | |
| , | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under | Ex parte Quayle, 1935 C.D. 11, 4 | 53 Q.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) 1,2 and 5-10 is/are pending in the ap 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1,2 and 5-10 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o | ewn from consideration. | | | | | |
| Application Papers | | · | | | | |
| 9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 10 March 2004 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E | a)⊠ accepted or b)⊡ objected t e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob | e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list | its have been received. Its have been received in Applicatority documents have been received in Applicatority documents have been received. | ion No ed in this National Stage | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other: | ate | | | | |

Art Unit: 2182

DETAILED ACTION

Response to Amendment

1. Claims 3 and 4 have been cancelled. Drawing objection is *maintained*. Applicant is reminded of the drawing requirement per 37 CFR 1.83 (a) and 1.84 (n) and (o), in this case examiner requires suitable black-box diagrams to properly illustrate the claimed invention.

(Labels with appropriate functional descriptions are required, especially in Figures 2-4)

Drawings

2. The drawings are objected to because black-boxes in Figures 1-4 should be labeled with appropriate function (i.e. main memory 36, configuration data 40, and control program 31, steps 100-180, execution program 120 with steps 121-124, and so on) to better illustrate the claimed invention to the public.

Corrected drawing sheets in compliance with 37 CFR 1.121 (d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121 (d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Page 3

Application/Control Number: 10/797,225

Art Unit: 2182

Claim Objections

3. Claim 1 is objected to because of the following informalities: The term "the memory remote memory (32)" should read "the remote memory (32)". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 fails to disclose the direct relationship between the controller (30) and removable memory module. The claim, as recited, does not indicated how the configuration data is related to the controller it is unclear as to how "when the controller is restarted, the configuration data is read out". Applicant states the relationship of the remote memory module and the controller in Paragraph [0022] of specification. Examiner will interpret the removable memory module as being part of the controller. Correction/ clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2182

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claim 1-5, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Werner Blumenstock (US Patent 6505084), hereafter Blumenstock, in view of Robert J. Kamper (US Patent 654797), hereafter Kamper.

Regarding claim 1 Blumenstock discloses a method of operating a controller (30) (memory programmable controller S1-Sn) to control an installation, the controller (30) (S1-Sn) being located on a communication medium, bus (33) (network connection 2), the controller (13) comprising an interface (34) (Figure 1) connected to the bus (33) (2), a main memory (36) (memory Sp1-SPn) for the storage of a control program (31) and means for executing the control program (31) (via control devices St1-Stn), comprising the steps of:

- a) storing configuration data (40) (5) in a removable memory module (39) (replaceable modules via SP1-SPn) in such that, when the controller (30) is restarted (switched on), the configuration data (40) are read out (loaded); (Column 3 lines 21-27, Column 3 lines 60-65)
- b) accessing a remote memory (32) (archive memory A) via the bus (33) (2); (Figure 2; Column 3 lines 25-27)
- c) transferring (via step 8, loading of data) the configuration data (40) stored in the memory remote memory (32) (archive memory A) to the controller (30) (S1-Sn); (Figure 2)

Art Unit: 2182

e) transferring a copy of the control program (31) (application program 4), stored in the remote memory (32) (archive memory A) into the main memory (36) (memory Sp1-SPn) of the controller (30) (S1-Sn); [Figure 1 and 2; Column 3 line 21-27; Column 4 line 17-26]

f) overwriting (replacing) a previous reference (subcomponent that's malfunctioning) to calling the installation program (42) by a current reference (component replacement) to calling the control program (31) (via automatic loading of current programs) during the transfer of the copy of the control program (31) into the main memory (36) of the controller (30). (Figure 2; Column 2 lines 25-31, 38-45, and Column 3 lines 39-42)

However Blumenstock does not explicitly disclose d) executing an installation program (42), stored in the main memory (36) of the controller (30) when the controller (30) is restarted, wherein the execution of the installation program (42) comprises using the configuration data (40) to access the remote memory (32) via the bus (33)

Kamper discloses d) executing an installation program (42) (boot-up sequence is initiated), stored in the main memory (36) of the controller (30) (server) when the controller (30) is restarted (power-up), wherein the execution of the installation program (42) comprises using the configuration data (40) (using the configuration data read from the removable storage device) to access the remote memory (32) via the bus (33) (wired or wireless connection) (Column 4 lines 6-19)

Blumenstock and Kamper are analogus art because they are from similar problem solving area of reconfiguration, where one computer transfers data to or from another computer which changes the functional configuration of one of the computers within the network after it has been established.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Kamper's removable storage holding configuration data with Blumenstocks "programmable controller", the motivation being to configure multiple servers easily (due to easy connection) and efficiently without requiring additional hardware to be incorporated into the server without encountering the problems of locating, connecting and securing the server. (Abstract; Column 1 line 62-67 and Column 3 lines 50-55 of Kamper)

(Examiner notes that claim language "for the production and packaging of cigarettes and cigars" is intended use language and is not given patentable weight.)

<u>Claim 2</u> is rejected for the reasons set forth hereinabove for claim 1, and further the modified Blumenstock discloses further comprising configuring the interface (34) with a unique address (IP address) for the controller (30) (server 118) on the bus (33) (via a wired or wireless connection; Column 4 line15-16), when the controller (30) is restarted (powered up). (Column 4 line 6-19 of Kamper)

Art Unit: 2182

<u>Claim 5</u> is rejected for the reasons set forth hereinabove for claim 1, and further the modified Blumenstock discloses wherein the installation program (42) in the main memory (36) of the controller (30) is overwritten (via steps 7 and 8) during the transfer of the copy of the control program (31) (Column 3 line 17-20) into the main memory (36) of the controller (30). (Column 2 line 38-44 and Column 3 line 58-65 of Blumenstock)

Regarding claim 9 Blumenstock discloses a controller (30) for controlling an installation for the production and packaging of cigarettes and cigars comprising

a main memory (36) (memory SP1..SP) for storing, a control program (31) (programs 3-6) (Figure 2)

means for executing the control program (31) (control devices St1-Sn) and an interface (34) connected to a bus (33) (connection via 2, Figure 1), wherein configuration data (40) is read out (loaded) and evaluated when the controller (30) is restarted(switched on); (Column 3 lines 19-27) Column 4 line 17-26

Blumenstock does not however, explicitly disclose the configuration data (40) (**program 4**) is stored in "a removeable memory module", (39) is installed at a location of the controller (30) such that the removable memory module (39) can move.

Kamper discloses the configuration data (40) is stored in a removeable memory module, (39) is installed at a location of the controller (30) such that the removable memory module (39) can move. (abstract; column 4 line 14-18)

Blumenstock and Kamper are analogus art because they are from similar problem solving area of reconfiguration, where one computer transfers data to or from another computer which changes the functional configuration of one of the computers within the network after it has been established.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Kamper's removable storage with Blumenstocks "programmable controller", the motivation being to configure multiple servers easily and efficiently without requiring additional hardware to be incorporated into the server without encountering the problems of locating, connecting and securing the server. [Abstract; Column 1 line 62-67 of Kamper]

Application/Control Number: 10/797,225 Page 7

Art Unit: 2182

Claim 10 is rejected for the reasons set forth hereinabove for claim 1, and further the modified Blumenstock discloses wherein during the transfer of the copy of the control program (31) (S1-Sn) into the main memory (36) (Sp1..Spn) the installation program (42) in the main memory (36) is overwritten (not performed). (Examiner notes "installation" via steps 7 and 8 are only "called" or performed during failure/malfunction, when no malfunction/failure is present in device a reliable restart is accomplished; Column 2 line 28-44]

6. Claim 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Werner Blumenstock (US Patent 6505084), hereafter Blumenstock, in view of Robert J. Kamper (US Patent 654797), hereafter Kamper as applied to claim 1 and 3, and further in view of Benedikt T Huber et al. (US Patent 6871150), hereafter Huber.

<u>Claim 6</u> is rejected for the reasons set forth where the modified Blumenstock disclosed claim 1, however the modified Blumenstock does not explicitly disclose wherein the configuration data (40) comprise memory location data with regard to a memory location of the copy of the control program (31), with regard to the memory, location of a last copy of the control program (31).

Huber discloses the configuration data (40) (data unit information) comprise

memory location data with regard to a memory location of the copy of the control program (31), with regard to the memory location of a last copy of the control program (31) (via flash block marked LATEST). (Column 25 line 54-Column 26 line 33)

Blumenstock, Kamper, and Huber are analogus art because they are from similar problem solving area of reconfiguration, where one structure transfers data to or from another structure which changes the functional configuration of one of the structures within the network after it has been established.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Blumnenstock by using Huber's intelligent electronic device; the motivation being to allow upgrades to firmware on a device to include new features

Art Unit: 2182

or correcting defects in the firmware of Blumenstock's system and thereby reduce cost. (Column 1 line 33-36)

<u>Claim 7</u> is rejected for the reasons set forth hereinabove for claim 6, and further Huber discloses wherein the copy of the control program (31) (via external function module 810; column 18 line 64-Column 19 line 1-12) is transferred into the main memory (36) of the controller (30) using the memory location data from the last memory location (via flash block marked LATEST). (Column 25 line 54-Column 26 line 33)

Claim 8 is rejected for the reasons set forth where the modified Blumenstock disclosed claim 1, however the modified Blumenstock does not explicitly disclose comparing the machine data and machines codes read in from the controller (30) when the controller (30) is restarted, before or with the start of the control program (31), wherein the configuration data (40) comprise machine data with regard to a machine executing the control program (31) and wherein the control program (31) is executed only when the machine codes match the machine data.

Huber discloses comparing the machine data and machines codes (the data in the program flash) read in from the controller (30) (intelligent electronic device IED 300) when the controller (30) is restarted, before or with the start of the control program (31), wherein the configuration data (40) comprise machine data with regard to a machine executing the control program (31) and wherein the control program (31) is executed only when the machine codes match (are compatible) the machine data. (Column 4 line 46-63; Column 12 line 35-63)

Blumenstock, Kamper, and Huber are analogus art because they are from similar problem solving area of reconfiguration, where one structure transfers data to or from another structure which changes the functional configuration of one of the structures within the network after it has been established.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Huber's intelligent electronic device, with the combination of Kamper and Blumenstock, the motivation being to allow upgrades to firmware on a device to include new features or correcting defects in the firmware code, and to reduce cost. (Column 1 line 33-36 of Huber)

Page 9

Application/Control Number: 10/797,225

Art Unit: 2182

Response to Arguments

7. Applicant's arguments filed 08/08/2007 have been fully considered but they are not persuasive. Applicants arguments are summarized as the following:

A. The examiner has not shown that Blumenstock '084 in view of Kamper '797 would render obvious a method of operating a controllers in which an installation program is stored in a central memory of the controller, which is executed when the controller, and is realized by storing a reference.

In response to applicant's argument, 'A', that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Blumenstock and Kamper are analogus art because they are from similar problem solving area of reconfiguration, where one computer transfers data to or from another computer that changes the functional configuration of one of the computers within the network after it has been established.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Kamper's removable storage holding configuration data with Blumenstocks "programmable controller", the motivation being to configure multiple servers easily (due to easy connection) and efficiently without requiring additional hardware to be incorporated into the server without encountering the problems of locating, connecting and securing the server. (Abstract; Column 1 line 62-67 and Column 3 lines 50-55 of Kamper)

B. While Applicant does not concede that Kemper '797 is analogous art, the combination of Blumenstock '084 and Kamper '797 has not been shown to teach the invention as claimed in Claims 1-2, 5, 9 and 10. Kamper '797 discloses an ordinary network, and together with Blumenstock '084 these references makes no mention of an installation program that is contained in the main memory of the controller and that is overwritten after a control program has been transferred from a remote memory into the main memory, as provided in Claim 1.

Art Unit: 2182

In response to argument, "B", examiner notes that an installation program (boot instructions of Kamper; Column 4 lines 6-9 and Column 6 lines 22-24) that is contained in the main memory of the controller (server 118) and that is overwritten after a control program (read configuration data) has been transferred from a remote memory (removable storage device) into the main memory (server) has been disclosed by Kamper in the above rejection of claim 1. (See claim 1 rejection)

C. The examiner has not shown that Blumenstock '084 in view of Kamper '797 would render obvious a method of operating a controllers in which an installation program is stored in a central memory of the controller, is executed when the controller, and is realized by storing a reference. For example, the current "original version" of the control programs can be stored in the respective main memory of the controller, with copies being stored in a remote memory, such as a central computer. Specifically, copies of the "original" control programs in the main memory of the controller can be stored on the remote memory, at certain predetermined times.

In response to argument that In response to applicant's argument, "C", examiner notes that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., copies of the "original" control programs in the main memory of the controller can be stored on the remote memory, at certain predetermined times) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Also, an installation program is stored in a central memory of the controller (via automatic loading from the archive memory A), is executed when the controller, and is realized by storing a reference (subcomponent/component replacement). (Column 3 lines 39-43 of Bluemenstock)

(Applicant is reminded that there is no distinction between an "original version" or "original copy" and a "copy", both are duplicates of each other.)

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2182

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brooke J. Dews whose telephone number is 571-270-1013. The examiner can normally be reached on M-Th 7:30-5:00, alternate F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SUPERVISORY PATENT EXAMINER